Test Report

Recommendations on the TRANSPORT OF DANGEROUS GOODS

(Manual of Tests and Criteria, Fourth revised edition)

Customer : ACER
Model : AS10E7E
Rating : 11.1V, 9000mAh / 99Wh

Approved By	Checked By	Prepared By
Esmond 12.16.09	Esmond 12.16.09	Sting 12.16.09

SIMPLO TECHNOLOGY CO., LTD.
ADD : No.471,Sec.2,Pa Teh Rd.,Hu Kou,Hsin Chu,Hsien 303 Taiwan
TEL: +886-3-5695920 FAX: +886-3-5695931

SIMPLO ELECTRONICS (Changshu) ,LTD.
ADD : No.2 Dong Nan Avenue,Changshu, Jingsu Province.China
TEL: 0512-52302255 FAX: 0512-52302277

1. Purpose of the Test：

To test each cell/battery is of the type proved to meet the requirements in the Recommendations on the TRANSPORT OF DANGEROUS GOODS, Manual of Tests and Criteria, Fourth revised edition.

2. Test Quantity：

2.1 Four batteries, at first cycle, in fully charged states. (T.1~T.5 test only)
2.2 Four batteries, at first cycles, in fully discharged states. (T.1~T.5 test only)
2.3 Four batteries, after fifty cycles ending in fully charged states. (T.1~T.5 test only)
2.4 Four batteries, after fifty cycles ending in fully discharged states. (T.1~T.5 test only)
2.5 Five component cells, at first cycle at 50% of the design rated capacity. (T.6 test only)
2.6 Five component cells, after fifty cycles ending in fully discharged states. (T.6 test only)
2.7 Four batteries, at first cycle, in fully charged states. (T.7 test only)
2.8 Four batteries, after fifty cycles ending in fully charged states. (T.7 test only)

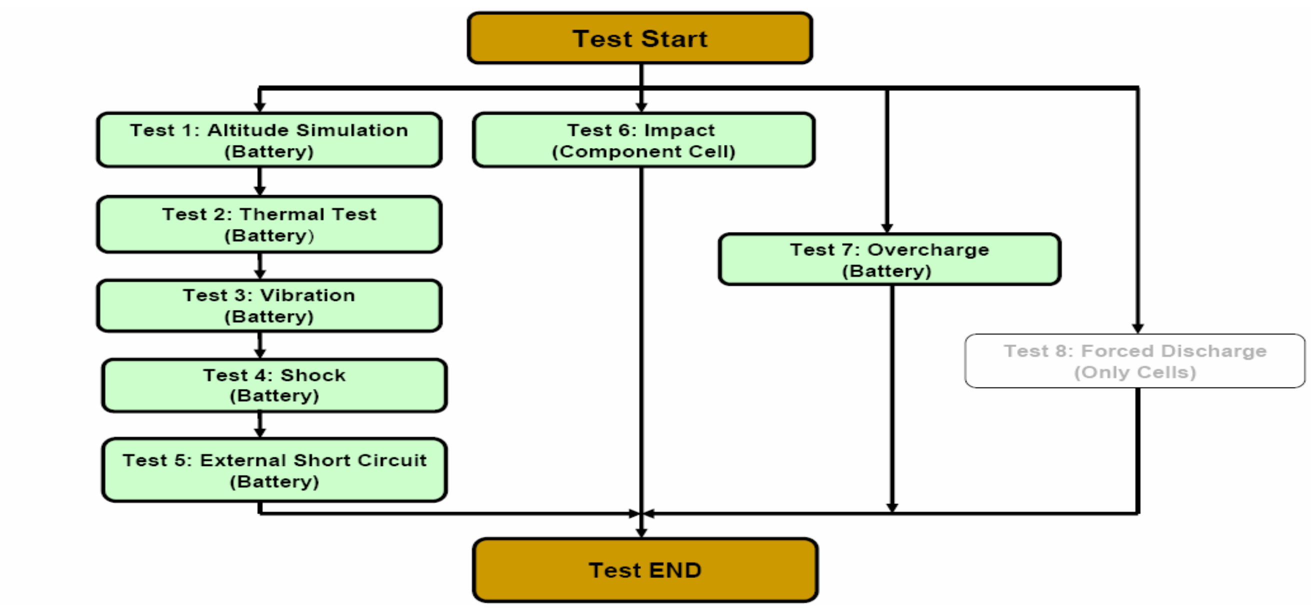
3. Test Equipment：

3.1 SMP -711 life cycles test system × 32 channel(ML-052,ML-053)
3.2 Vacuum Tank x1(ML-308)
3.3 Agilent -Digit-multi-meter 6 1/2 34401A x1(ML-257)
3.4 Micro-Electronic scale x1(TD-166)
3.5 WIT-Thermal shock chamber x1(ML-018)
3.6 King Design -Vibration Testerx1 (ML-233)
3.7 King Design -Shock tester x1 (ML-056)
3.8 WITGROUP- Programmable Temperature & Humidity Chamberx1 (ML-010)
3.9 YOHAGOWA –DR230 Hybrid Recorder x1 (ML-198)
3.10 YOHAGOWA –MX100 Recorder x1 (ML-068)
3.11 JYI SHENG-Impact tester x1 (ML-076)
3.12 ABM –GCD-5030D-Large power supply x4 (ML-140, ML-141, ML-142, ML-143)

4. Test procedure：

4.1 All detail related test procedure shall be follow Standard Operation Procedure of SMP subjected W11-001 Rev.2 issue documentation.

4.2 Test flow shall be follow below statement.



5. Test Result：

5.1 T.1 ~T4 Test results: **Pass**

5.1.1 Batteries meet requirement regard mass loss was less then 0.1% and voltage loss less 10% relating original situation.

5.1.2 No leakage, No venting, No disassembly, No rupture and no fire.

5.2 T.5 Test result: **Pass**

5.2.1 All Batteries can meet requirement subjected external temperature does not exceed 170℃.

5.2.2 All Batteries no disassembly, no rupture and no fire within six hours

5.3 T.6 Test results: **Pass**

5.3.1 All cells can meet requirement subjected external temperature does not exceed 170℃.

5.3.2 All cells no disassembly and no fire within six hours of this test.

5.4 T.7 Test results: **Pass**

5.4.1 All batteries can meet no disassembly and no fire within seven days of the test.

All detail evidence will be confirmed follow appendix described.

A1. T.1~T7 detail reports:

Test During: 09/12/02~09/12/16 **Prepared by: Esmond Huang**

Customer : Acer Model : AS10E7E 3S3P Sample No.		T-1 Before test	T-1 After test	T-2 After test	T-3 After test	T-4 After test	T-5 After test Max Temp. (℃)	Max Mass Loss (%) ((T.1 before-T.4 after)/T.1 before)*100%)	Result	
1	Mass (g)	467.4	467.4	467.4	467.3	467.3	55.3	0.02%	Mass Loss<0.1%	Pass
	OCV (V)	12.573	12.573	12.539	12.539	12.539		0.27%	OCV >90%	Pass
2	Mass (g)	467.7	467.7	467.6	467.6	467.6	55.3	0.02%	Mass Loss<0.1%	Pass
	OCV (V)	12.569	12.569	12.534	12.534	12.533		0.29%	OCV >90%	Pass
3	Mass (g)	467.5	467.4	467.4	467.4	467.4	55.1	0.02%	Mass Loss<0.1%	Pass
	OCV (V)	12.567	12.567	12.528	12.528	12.527		0.32%	OCV >90%	Pass
4	Mass (g)	467.4	467.4	467.3	467.3	467.3	55.2	0.02%	Mass Loss<0.1%	Pass
	OCV (V)	12.569	12.568	12.532	12.531	12.531		0.30%	OCV >90%	Pass
5	Mass (g)	467.8	467.8	467.8	467.7	467.7	55.3	0.02%	Mass Loss<0.1%	Pass
	OCV (V)	12.569	12.569	12.541	12.541	12.541		0.22%	OCV >90%	Pass
6	Mass (g)	467.6	467.5	467.5	467.4	467.4	55.2	0.04%	Mass Loss<0.1%	Pass
	OCV (V)	12.571	12.571	12.536	12.536	12.535		0.29%	OCV >90%	Pass
7	Mass (g)	467.5	467.5	467.4	467.4	467.4	55.1	0.02%	Mass Loss<0.1%	Pass
	OCV (V)	12.564	12.563	12.526	12.526	12.525		0.31%	OCV >90%	Pass
8	Mass (g)	467.8	467.8	467.8	467.7	467.7	55.2	0.02%	Mass Loss<0.1%	Pass
	OCV (V)	12.566	12.565	12.534	12.533	12.533		0.26%	OCV >90%	Pass
9	Mass (g)	467.5	467.5	467.5	467.4	467.4	55.2	0.02%	Mass Loss<0.1%	Pass
	OCV (V)	9.677	9.677	9.642	9.642	9.641		0.37%	OCV >90%	Pass
10	Mass (g)	467.5	467.5	467.5	467.4	467.4	55.1	0.02%	Mass Loss<0.1%	Pass
	OCV (V)	9.662	9.662	9.634	9.634	9.633		0.30%	OCV >90%	Pass
11	Mass (g)	467.6	467.6	467.5	467.5	467.4	55.3	0.04%	Mass Loss<0.1%	Pass
	OCV (V)	9.669	9.669	9.641	9.640	9.640		0.30%	OCV >90%	Pass
12	Mass (g)	467.8	467.8	467.8	467.7	467.7	55.1	0.02%	Mass Loss<0.1%	Pass
	OCV (V)	9.673	9.673	9.641	9.641	9.640		0.34%	OCV >90%	Pass
13	Mass (g)	467.6	467.6	467.6	467.5	467.5	55.2	0.02%	Mass Loss<0.1%	Pass
	OCV (V)	9.668	9.668	9.637	9.637	9.636		0.33%	OCV >90%	Pass
14	Mass (g)	467.9	467.8	467.8	467.7	467.7	55.1	0.04%	Mass Loss<0.1%	Pass
	OCV (V)	9.662	9.661	9.629	9.629	9.628		0.35%	OCV >90%	Pass
15	Mass (g)	467.5	467.5	467.5	467.4	467.4	55.3	0.02%	Mass Loss<0.1%	Pass
	OCV (V)	9.668	9.668	9.643	9.642	9.642		0.27%	OCV >90%	Pass
16	Mass (g)	467.6	467.5	467.4	467.4	467.4	55.1	0.04%	Mass Loss<0.1%	Pass
	OCV (V)	9.671	9.670	9.638	9.638	9.637		0.35%	OCV >90%	Pass

Customer : Acer Model : AS10E7E 3S3P Sample No.		T-6 After test Max Temp. (℃)	**Result**
1	**RSOC=50%**	**35.6**	Pass
2	**RSOC=50%**	**34.9**	Pass
3	**RSOC=50%**	**34.6**	Pass
4	**RSOC=50%**	**35.3**	Pass
5	**RSOC=50%**	**34.7**	Pass
6	**RSOC=0%**	**32.3**	Pass
7	**RSOC=0%**	**32.1**	Pass
8	**RSOC=0%**	**31.6**	Pass
9	**RSOC=0%**	**31.6**	Pass
10	**RSOC=0%**	**32.2**	Pass

Customer : Acer Model : AS10E7E 3S3P Sample No.	T-7 After test **Result**
1	Pass
2	Pass
3	Pass
4	Pass
5	Pass
6	Pass
7	Pass
8	Pass

Prepared by: Esmond Huang

Criteria:

T-1~T4 Test
1. Batteries meet requirement regard mass loss was less then 0.1% and voltage loss less 10% relating original situation.
2. No leakage, No venting, No disassembly, No rupture and no fire.

T-5 Test
1. All Batteries can meet requirement subjected external temperature does not exceed 170℃.
2. All Batteries no disassembly, no rupture and no fire within six hours.

T-6 Test
1. All Batteries can meet requirement subjected external temperature does not exceed 170℃.
2. All Batteries no disassembly and no fire within six hours.

T-7 Test
1. All batteries can meet no disassembly and no fire within seven days of the test.

A2. Equipment for test:

